### **Chapter 3: Comments on Draft EIS and Responses**

In May 2003, BPA sent the Draft EIS to agencies, groups, individuals, and libraries for public review and comment on the Proposed Action and alternatives. BPA held four public meetings during the 45 day public review period, which ended on July 7, 2003. These public meetings were held in La Grande, Oregon (June 9, 2003); Enterprise, Oregon (June 10, 2003); Imnaha, Oregon (June 11, 2003); and Lostine, Oregon (June 12, 2003).

BPA recorded and numbered all written correspondence, including letters, comment sheets, electronic mail, and forms that were received during the public review period. BPA recorded and numbered all letters and other comments in the order in which they were received, starting with 001 and ending with 020. Within each comment letter, or record, BPA assigned a separate code (01, 02, 03, etc.) to each comment within the record to facilitate development and tracking of responses. This chapter contains the coded comment documents, presented in order of receipt, followed by responses to those comments.

The information presented in this Final EIS was developed, in part, as a result of these letters and comments.

JUN 1 3 2003

### Kuehn, Ginny - DM-7

From: Fred Brockman [fred.brockman@gte.net]

Sent: Thursday, June 12, 2003 10:42 PM

To: BPA Public Involvement

Subject: Grande Ronde and Imnaha Spring Chinook Project

My wife and I are writing to express our concerns about the Grande Ronde and Imnaha Spring Chinook Project. We own property in the High Lostine subdivision, just above the location for the planned Lostine Hatchery. I have printed and read the draft EIS and the NE Oregon Hatchery Project, Spring Chinook Master Plan. I am responding by e-mail because I was not able to attend today's meeting in the Lower Lostine subdivision due to work commitments that interfered with my plan to attend the meeting. I am a supporter of the Nez Perce Tribe and a supporter of enhancing salmon in Wallowa County and the Northwest but have two grave concerns that I do not see addressed in these two documents.

- 1. Has the hydrology of the area been characterized to show removal of water by the Hatchery wells is from a shallower aquifer unconnected to the High Lostine subdivision well (and to the Lower Lostine subdivision). We have a groundwater permit from the State. Who will insure the huge amounts of groundwater that is pumped (relative to what we pump) will not impact the High Lostine's well? The Tribes, the State ODFW, federal agencies? Page 2-10 of the draft EIS says "Three new groundwater wells would provide up to 1200 gallons per minute to the facility". Page 3-71 of the same document says Production can apparently be sustained for long-term pumping without affecting nearby domestic wells." My hydrology PhD friends say this latter statement is misleading to possibly blatantly false unless a tracer test over weeks to months was performed concomitant with pumping of the new wells. Second, a pump test alone of a few hours or days will NOT say anything about the potential for longterm pumping to impact nearby dometic wells, unless the new wells and the domestic wells are intimately connected. I am strongly opposed to the Hatchery unless we have written and legally accepted assurance from the Nez Perce, the State, or BPA that either (a) provides strong scientific proof that our water source is not connected to or influence by withdrawals from the new wells, or (b) protects the productivity of our water source or agrees to replace it if it is substantially degraded. I am of the opinion that the tribes and agencies are being non-responsible and exploitive if they do not address this issue.
- 2. I am sure there are scientific reasons that this particular location on the South Fork was selected as the best location. However, I question the extent to which the sociological and public relation considerations entered the equation. I suspect noone or almost noone wants the hatchery in their backyard. But it is obvious that a location as little as one-half to ¾ mile further downriver would greatly minimize the number of directly affected people. It would also greatly minimize the number of visitors and local people and that have to see the weir, pond, intake structure, and fish ladder that will be in the direct foreground of the view from the Lostine River bridge. The paragraph at the

001-01

001-02

bottom of page 3-105 of the draft EIS unfairly minimizes, in our view, the impact of the weir, pond, intake structure, and fish ladder on the river view from the bridge. Cars travel slowly over this bridge, people look upriver and downriver at the views, and sometimes stop to do so. While northbound travelers may see the structures "for a few seconds at the river crossing", a few seconds is all it takes to make a lasting impression and remembrance. Second, I disagree that "Except for a relatively brief glimpse, southbound travelers would not generally see the intake [structure]". Most would almost certainly see the structure and those that look at the river will certainly see the weir, the pond, and the fish ladder. Again, a glimpse it all it takes to make a lasting impression and remembrance. Wouldn't it make sense to have a somewhat less optimal scientifically-selected location that would greatly mitigate the number of directly affected people, and preserve the view of the river that only 1 mile further upstream is a Wild and Scenic River? Even though it has no such designation at the bridge, visitors want to see a river that looks like a Wild and Scenic River when they know it is designated as such one mile further upriver. In summary I see no evidence that sociological and public relation considerations for siting the hatchery entered the equation, and I strongly feel they should.

001-02 (con't.)

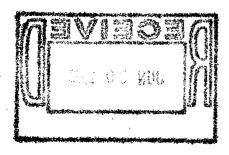
Until these concerns are addressed to my satisfaction I will not support the Lostine Hatchery. I understand these concerns may have been addressed and I do not have the documents or reports; please send me the documents or reports if they have been addressed.

001-03

Sincerely, Fred and Donna Brockman

1805 West 37<sup>th</sup> Avenue

Kennewick, WA 99337



As referenced in the Draft EIS (Section 3.6.1.1), several groundwater wells were drilled at the proposed Lostine Hatchery site – the Lostine North Well, Lostine South Well, Primary Production Well, and South Observation Well. Information from these wells, and other sources, was used to characterize the area's geology, hydrogeology, and aquifer characteristics through aquifer testing. The results of aquifer testing were summarized in the Draft EIS and presented in detail in two associated technical reports prepared by Montgomery Watson (Report of Lostine Site Production Wells Installation and Testing, February 1999, and Lostine Site Production Wells Supplemental Installation and Testing, February 2001). The purpose of the Montgomery Watson studies was to identify a sustainable supply of good quality, disease-free water for the proposed hatchery.

To determine well production potential and to measure the effect of proposed hatchery groundwater withdrawals, Montgomery Watson conducted aquifer pumping tests in 1999 and 2000/2001. Both sets of tests showed consistent results, although slightly different groups of wells were used. Both sets of tests consisted of standard, step-rate tests (pumping at different rates for short periods of time) to evaluate well efficiency and capacity and to determine optimal pumping rates for the longer, constant-rate tests. In January 1999, the Lostine South Well was pumped at a constant rate of about 400 gpm for 70 hours while water levels were measured in the Lostine South Well and in the Hayward's well in the Lostine subdivision (about 1,500 feet south of the Lostine South Well). Maximum drawdown measured in the Hayward Well was a few inches (0.20 feet) and the well water level recovered quickly after pumping of the Lostine South Well stopped (97 percent recovery in 160 minutes). Montgomery Watson calculated a "worse case" drawdown of about 0.6 feet in the Hayward Well after 2 years of continuous 400 gpm pumping of the Lostine South Well ("worse case" because continuous pumping of site wells is not proposed).

In January 2001, Montgomery Watson conducted a 25-hour constant-rate test in the Lostine North Well, and a 14-day constant-rate test in the hatchery site Primary Production Well. For each of the constant-rate tests, water levels were monitored in three other wells including the South Observation Well (installed near the Lostine subdivision). As in the 1999 test, drawdown in the observation well was minimal (a maximum of about 6 inches) and the water level recovered quickly after pumping stopped. Montgomery Watson calculated that, if all three site supply wells were pumped simultaneously at optimal flow rates, the combined drawdown in the nearest domestic well would be about 1.5 feet after 10 weeks of continuous pumping and approximately 2 feet after 2 years of continuous pumping (for comparison, measurements showed approximately 112 feet of standing water in the Hayward well). Continuous pumping was used to conservatively estimate drawdown because simultaneous, continuous pumping of the three wells would be required for only 2 to 3 months per year under normal hatchery operations and would typically occur during the months of May and June when river levels would be at their highest (FishPro/HDR 2004b), rather than in January when the aquifer pumping tests were conducted and river levels are relatively low. Montgomery Watson concluded that desired groundwater production levels for the hatchery could be sustained and regulated without affecting production in nearby domestic wells.

### 001-02

As stated in the Draft EIS (Section 2.3), Section 1.8 of the Final EIS, and the NEOH Master Plan (Ashe et al. 2000), several other potential sites in the Imnaha and Grande Ronde Subbasins were evaluated, but dropped from further consideration due to a variety of reasons, including inadequate water supply or quality, lack of available space, inadequate power supply, and/or unavailability for acquisition. One suitable site was identified on the Lostine River, downstream of the proposed Lostine River Hatchery site. This site, at the Strathearn Ranch (Grande Ronde Subbasin site 22, Draft EIS, Table 1-1), met the project requirements, but the owner ultimately decided not to make the property available. Project team members also investigated, and eliminated from further consideration, possible sites on the west side of the Lostine River. The one feasible west-side site was dropped from further consideration because it would require substantially more site development (road improvements, bridge replacement, a powerline across the river, and extensive site clearing and grading); have a potentially

3-2 Bonneville Power Administration

greater impact to adjacent landowners (immediately adjacent to one residence and requiring several other residents to drive through hatchery facilities to access their property); and result in more disruption and potential impact to the natural environment (McMillen 2003, personal communication).

Section 3.9.3.3 of the Draft EIS discusses the consequences of the Proposed Action relative to visual quality issues at the Lostine River Hatchery. The intake structure would be visible to northbound travelers on the Lostine River Road for a few seconds at the river crossing. Southbound travelers may catch a glimpse of the intake structure, but for the most part, it would be screened by existing vegetation. These proposed structures would be located about 1 mile below the portion of the Lostine River designated as a Wild and Scenic River.

### 001-03

The file of supporting documentation for this project is quite extensive and includes thousands of pages and about 150 different documents and records (refer to the references cited in the Draft EIS, Chapter 7, and Final EIS, Chapter 2). Although summaries of the results and findings of most of these materials are incorporated into this EIS, all materials cited are available to the public through BPA. To acquire any of these documents, please contact BPA to request specific materials.

### Wallowa County Public Works

619 Marr Pond Lane Enterprise, Oregon 97828

Road Department Vegetation Department Parks Department Solid Waste Department Telephone 541-426-3332 Russ McMartin Fax 541-426-2074 Director of Public Works Grande Ronde – Imnaha Spring Chinook Hatchery Project Subject: Draft Environmental Impact Statement I. Lostine River Hatchery Ouestions: A. Burying a 24-inch and 18-inch pipeline alongside Lostine River Road (County Road 551) 1. Minimum depth of the top of pipe needs to be 48 inches below the bar pit. 2. Will this pipe be in county right way? 3. Will the pipeline disturb the existing road? 4. What is your plan to maintain traffic on the Lostine River Road during construction of the pipeline? 5. The hatchery will pay for any future road repairs due to the 002-01 pipe line. 6. When the pipeline crosses the county road the asphalt will be damaged. After compaction and settling a full-width asphalt overlay patch will be put on to return the road to a smooth ride condition. 7. The edge of septic drain field is on the old channel gravel bar and within 100 ft. of the Lostine River. Will DEQ issue a permit for a drain field so close to the river? 8. May require our own construction inspector and compensation. II. Imnaha Final Rearing Facility A. Septic system below the berm at approximately river level. Will DEQ 002-02 issue a septic permit for this? B. House pasture well 1. Will this pipe be in the county right of way? Currently there is a telephone and fiber optic line in the right of way. 2. How will you maintain traffic on the county road during construction? 3. Minimum depth of the top of pipe will be 48 inches below the 4. The hatchery will pay for any future road repairs due to the pipe line. 5. Will need an easement permit from the hatchery to the county

6. Need easement permit for new power line crossing county road.

002-03

7. County turn out area - design and construction to be approved by Director of Public Works.

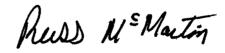
8. May required our own construction inspector and compensation.

002-03 (con't.)

### III. Imnaha Satellite Facility

- A. Bringing a buried power line about six miles from substation.
  - 1. County Road 727 extends to the Imnaha River Woods intersection.
  - 2. Telephone and fiber optic lines already exist in right of way.
  - 3. How will traffic be maintained?
  - 4. There is about one mile of asphalt paving in this section. How will it be affected?
    - a. If a trench is cut the repair will be a full-width overlay.
  - 5. Depth of power line will be 48 inches below the bar pit.
  - 6. Will you put a telephone line in the same trench?
  - 7. Wallowa County and the Forest Service have an agreement that as soon as the Forest Service brings the section of road from Gumboot to Imnaha River Woods up to county standards the county will take over the maintenance of this section.
  - 9. May require our own construction inspector and compensation.
  - 10. Wallowa County has plowed the snow from the Pallette Place to the Imnaha Satellite Facility under a contract

002-04



Comment acknowledged; project infrastructure would be designed and built in compliance with all applicable local, state, and federal rules, regulations, and ordinances and at project cost. Although federal facilities are normally exempt from local standards, the project would be designed and built in accordance with County standards when feasible given project needs and budget. The pipeline would be within an existing County right-of-way and would not impact the traveled surface, except where the pipeline crosses the road. During construction, traffic would be managed by signs and/or flaggers, as needed. Pipeline work may be subject to inspection by the County. The site drain field would be designed and permitted in conformance with applicable local and state standards.

### 002-02

The Imnaha Final Rearing Facility is no longer proposed for construction (see Section 1.5 in the Final EIS). After further study, the project co-managers devised a way to use the other proposed facilities to accommodate the functions intended for the Imnaha Final Rearing Facility. The activity proposed at this site is limited to removal of an existing Acrow (steel panel) bridge and concrete bridge abutments. The bridge panels would be reinstalled at the Lostine Adult Collection Facility and the concrete bridge abutments would be hauled off-site for disposal.

### 002-03

See response to 002-02.

### 002-04

Bringing a buried powerline 6 miles from a substation to the Imnaha Satellite Facility is no longer part of the Northeast Oregon Hatchery Project. Power would continue to be provided by generators housed in existing buildings.

# GRANDE RONDE – IMNAHA SPRING CHINOOK PROJECT DEIS

Please mail your comments by July 7, 2003

**COMMENTS:** 

On the adequacy of the Environmental Impact Statement:	
On the merits of the different alternatives:	
the paved soud done first, as we fire they close to the soud and already the further is way the first.	003-0
Preferred ways to mitigate concerns or effects:	
	,
other: I think Rick Jollman and the dygerant entities that were at this materix were great.	003-02
while they were being attached by the Jocals.	
Name Loyena Jacky Address 64855 granger Rd Jastino	
Phone/E-Mail Address (optional) Londie 50 @ Instrucil. Com	

Granger Road would be paved after construction activities to prolong the life of the paved surface. During construction, dust abatement on Granger Road would be accomplished with frequent watering. If watering should prove ineffective, other means of dust control would be considered.

### 003-02

Comment acknowledged; thank you. Several other attendees of the Lostine public meeting submitted written comments as well. See below. The issues expressed at the meeting appear to be contained within those written comments, and the project planning team has considered them and attempted to respond to them fairly and objectively.

### WALLOWA COUNTY PLANNING DEPARTMENT

WALLOWA COUNTY COURTHOUSE

101 S. River St. Rm. B-1 Enterprise, OR 97828 541-426-4543 x24, Fax: 541-426-6046, depplan@co.wallowa.or.us

# Comments on BPA's Draft EIS for the Grande Ronde - Imnaha Spring Chinook Hatchery Program

Overall Bonneville has done a good job of listening to the concerns expressed at its neighborhood meetings and has incorporated these concerns into its draft EIS.

004-01

Concerns expressed by the Planning department have been that the hatcheries be good neighbors and keep a low profile. This is especially important with the Lostine facility due to its proximity to Pat's South Fork Subdivision and Lostine River Acres. Both the Lostine and Imnaha Rivers are important County assets.

On page 3-98 the draft EIS addresses Plans and Policies Pertinent to Aesthetics such as protecting rural character and open space. On page 3-120and 2-11 the draft EIS addresses methods to reduce long term noise and noise produced by construction.

004-02

Larger buildings such as dwellings, bunkhouses, shops, etc will be wood sided with metal roofs and will use colors that will blend in with the surroundings. Lights will be non-glare, shielded and directed on site. Tree removal will be minimized. Additional trees will be planted. (pages 2-13, 3-105, 3-106)

And, as required by all Wallowa County Zone Permits, page 4-5 states that all buildings will comply with State Building Codes and all facilities will meet DEQ regulations. Additionally, the facilities will abide by established water rights as administered by the State of Oregon.

The draft EIS also recognizes the process required to permit the facilities in Wallowa County on page 4-4. Whereas the propagation, cultivation, maintenance and harvesting of aquatic species is an outright use in both Exclusive Farm Use and Timber/Grazing, the facilities, including dwellings, must be permitted. As the accessory dwellings called for in the draft EIS are conditional uses and would require a public hearing, Bonneville must apply for and receive conditional land use permit approval. The Planning Commission, at public hearing, will review the entire Wallowa County portion of the project (Lostine and Imnaha). The hearing will be preceded by a review of the project by the Wallowa County Natural Resources Technical Advisory Committee. The draft EIS, WCNRTAC review, and associated comments will be entered into the record.

004-03

cc: Bill Oliver, Planning Director

Mike Hayward, Chairman of the Board of Commissioners
Bruce Dunn, John Williams, Co-chair, Wallowa County Natural Resources Technical Advisory Committee
Mickey Carter, BPA Environmental Protection Specialist
BPA Hatchery file

C:\data\BPAHatcheries\CommentsOnDraftEIS062303.wpd

Comment acknowledged; thank you. BPA and project co-managers believe that public involvement in the environmental analysis process is crucial for making sound decisions.

### 004-02

Comment acknowledged; it is the intent of the project co-managers to be good neighbors within the community. The project design and operation would comply with applicable local, state, and federal rules, regulations, and ordinances.

### 004-03

Project co-managers would seek any applicable permits or approvals from Wallowa County prior to project implementation. Although federal facilities are normally exempt from local standards, the project would be designed and built in accordance with County standards when feasible given project needs and budget.

3-6 Bonneville Power Administration

### GRANDE RONDE- IMNAHA SPRING CHINOOK PROJECT DEIS

### **COMMENTS:**

On the adequacy of the Environmental Impact Statement:

A phase out of hatchery operations has not been adequately addressed. The duration of operations should be considered with prevention of genetic bottle necking emphasized.

005-01

Kendrick Moholt 67075 Lostine River Road Lostine, OR 97857 (541) 569-2350

As discussed in Section 2.2 of the Final EIS, phase out of the hatchery facilities is not reasonably foreseeable. It is anticipated that spring/summer chinook would be collected yearly for approximately 20 to 25 years, or until adult replacement rates for the naturally spawned population suggest that the population is naturally sustainable (Master Plan, Ashe et al. 2000). The expected duration of the hatchery program would be dependent on changes outside of hatchery operations (i.e., the hatchery program may operate over a longer period of time if other factors limiting population recovery are not mitigated or otherwise controlled, or the hatchery program may operate over a shorter period of time if other limiting factors are reduced). In either case, analysis of hatchery removal would be a programmatic decision, depending on the success of the overall recovery effort, of which the Proposed Action is a component.

As discussed in Section 1.6 of the Draft EIS and Section 1.1 of the Final EIS that describes project scope, programmatic issues, such as management of genetic integrity, are outside the scope of this hatchery facility-related EIS. However, genetic considerations are integrated into the fish production program through measures that would be taken to assure genetic variety of populations, including: collecting broodstock from across the entire returning adult run using a sliding scale that incorporates both wild and hatchery fish as broodstock based on the total number of returning adults; selecting healthy broodstock irrespective of size (i.e. not selecting only the biggest fish); and allowing hatchery broodstock to spawn naturally above the weir, with the resulting offspring considered wild fish.

006-02

006-03

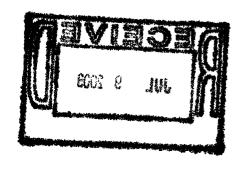
### GRANDE RONDE-IMNAHA SPRING CHINOOK PROJECT DEIS

### **COMMENTS:**

On the adequacy of the Environmental Impact Statement:

Mitigation for the loss of wetlands and riparian vegetation due to the construction of a 300 foot levee along the west bank of the Lostine River at the Lostine Adult Collection Facility has not been adequately addressed. This three to five foot high levee is to be made of rock and soil. Sedimentation problem due to adding loose soil to the bank have not been addressed. The aesthetic impact of the 300 foot levee is not adequately addressed. A statement on page 3-90 of the DEIS claims traffic on the road is light. To the contrary, this road is the most heavily used access to the Eagle Cap Wilderness Area. It can be assumed that individuals visiting the wilderness area are concerned with the natural aesthetics of the wild and scenic river.

Kendrick Moholt 67075 Lostine River Road Lostine, OR 97857 (541) 569-2350



As described in Sections 4.5.2, 4.5.4 and 4.7.2 of the Draft EIS, the project includes a commitment to conduct formal wetland delineations at the proposed Lostine Adult Collection Facility and the Lostine River Hatchery and to implement any compensatory mitigation based on the outcome of the delineations and applicable regulations. Any necessary mitigation plan(s) would be developed for the loss of wetlands as part of the permitting process through the U.S. Army Corps of Engineers under Section 404 of the Clean Water Act. Areas disturbed by construction, including riparian areas, would be revegetated by native species and managed to prevent the spread of non-native and weed species.

### 006-02

The potential for site-specific erosion and how to avoid it would be addressed in detailed facility design and erosion and sediment control specifications prepared as part of project construction documents during the final design phase of the project. The project design would include measures to avoid long-term erosion related to the placement of in-water structures as well as temporary, construction-related erosion. Best management practices specified in construction documents would be in accordance with Oregon Department of Transportation's Erosion and Sediment Control Specification 0280. Best management practices would, most likely, be included as conditions of the various permits required for the project. All permit conditions would be followed.

### 006-03

The text on page 3-90 of the Draft EIS was revised to clarify that the number of potentially affected viewers would be highest during the summer (during periods of the most tourist/recreational use). Although, vegetative screening would also be the greatest during the summer (see Final EIS, Chapter 2.2). Figure 3.9-6 in the Draft EIS shows the existing view from Lostine River Road and a visual simulation of the proposed facilities in the same location. Section 3.9.3.2 (page 3-105) of the Draft EIS explains that several of the new facilities would be screened from public view by the existing vegetation along the roadway and that passing motorists would only have a brief view when traveling northbound. Given the current facilities in the area, and the proposed changes and additions, the project would not substantially alter the area's existing visual character.

# GRANDE RONDE – IMNAHA SPRING CHINOOK PROJECT DEIS JUL 1 4 2003

COMME	VTS: Lastenie River Hatchery
On the ade	quacy of the Environmental Impact Statement:
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tab	le and therefore loosing the water in our well 007-0
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-	exertion of the state of the st
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Kive	V. Hatchery
	V .
Other:	ou need to agine a right of way from
Kuth	ou need to againe a right of way from e Shuman accross a piece of private property 007-03 e Granger Rd joins the don't Re O
wher	e Granger Rd joins the County Road
<del></del>	
	Name Ruth Shuman
•	Address Pro. Box 96 Lostine, OR 97857
	Phone/E-Mail Address (optional)

As referenced in the Draft EIS (Section 3.6.1.1), several groundwater wells were drilled at the proposed Lostine Hatchery site – the Lostine North Well, Lostine South Well, Primary Production Well, and South Observation Well. Information from these wells, and other sources, was used to characterize the area's geology, hydrogeology, and aquifer characteristics through aquifer testing. The results of aquifer testing were summarized in the Draft EIS and presented in detail in two associated technical reports prepared by Montgomery Watson (Report of Lostine Site Production Wells Installation and Testing, February 1999, and Lostine Site Production Wells Supplemental Installation and Testing, February 2001). The purpose of the Montgomery Watson studies was to identify a sustainable supply of good quality, disease-free water for the proposed hatchery.

To determine well production potential and to measure the effect of proposed hatchery groundwater withdrawals, Montgomery Watson conducted aquifer pumping tests in 1999 and 2000/2001. Both sets of tests showed consistent results, although slightly different groups of wells were used. Both sets of tests consisted of standard, step-rate tests (pumping at different rates for short periods of time) to evaluate well efficiency and capacity and to determine optimal pumping rates for the longer, constant-rate tests. In January 1999, the Lostine South Well was pumped at a constant rate of about 400 gpm for 70 hours while water levels were measured in the Lostine South Well and in the Hayward's well in the Lostine subdivision (about 1,500 feet south of the Lostine South Well). Maximum drawdown measured in the Hayward Well was a few inches (0.20 feet) and the well water level recovered quickly after pumping of the Lostine South Well stopped (97 percent recovery in 160 minutes). Montgomery Watson calculated a "worse case" drawdown of about 0.6 feet in the Hayward Well after 2 years of continuous 400 gpm pumping of the Lostine South Well ("worse case" because continuous pumping of site wells is not proposed).

In January 2001, Montgomery Watson conducted a 25-hour constant-rate test in the Lostine North Well, and a 14-day constant-rate test in the hatchery site Primary Production Well. For each of the constant-rate tests, water levels were monitored in three other wells including the South Observation Well (installed near the Lostine subdivision). As in the 1999 test, drawdown in the observation well was minimal (a maximum of about 6 inches) and the water level recovered quickly after pumping stopped. Montgomery Watson calculated that, if all three site supply wells were pumped simultaneously at optimal flow rates, the combined drawdown in the nearest domestic well would be about 1.5 feet after 10 weeks of continuous pumping and approximately 2 feet after 2 years of continuous pumping (for comparison, measurements showed approximately 112 feet of standing water in the Hayward well). Continuous pumping was used to conservatively estimate drawdown because simultaneous, continuous pumping of the three wells would be required for only 2 to 3 months per year under normal hatchery operations and would typically occur during the months of May and June when river levels would be at their highest (FishPro/HDR 2004b), rather than in January when the aquifer pumping tests were conducted and river levels are relatively low. Montgomery Watson concluded that desired groundwater production levels for the hatchery could be sustained and regulated without affecting production in nearby domestic wells.

### 007-02

The potential for site-specific erosion and how to avoid it would be addressed in detailed facility design and erosion and sediment control specifications prepared as part of project construction documents during the final design phase of the project. The project design would include measures to avoid long-term erosion related to the placement of in-water structures as well as temporary, construction-related erosion. Some localized and increased bank erosion typically occurs when placing structures in an active river system. Proper project design and construction would reduce this erosion as much as possible. Therefore, project design documents would clearly show proper placement for hatchery structures; define areas of clearing and grubbing; specify locations of silt fences; and provide details for sedimentation ponds, access road preparation and maintenance, and any other permanent or temporary erosion control measures. Best management practices specified in construction documents would be in accordance with Oregon Department of Transportation's Erosion and Sediment Control

Specification 0280. Best management practices would, most likely, be included as conditions of the various permits required for the project. All permit conditions would be followed.

### 007-03

Thank you for the notification regarding site access. If the project proceeds to final design phase, access rights would be investigated and negotiated as necessary. Permission to access the site across private property would be sought if access via public right-of-way or easement is not possible.

3-10 Bonneville Power Administration

# GRANDE RONDE – IMNAHA SPRING CHINOOK PROJECT DEIS

Please mail your comments by July 7, 2003

### COMMENTS:

On the adequacy of the Environmental Impact Statement:	
Impact to local residents has been minimized hand	
would have agreeter impact than Drated dece to	
- Mappie, docte, dust, danger to animales (our	008-01
- ung coms men overs was a tish hatcher freek) - There	
summer would allo effect local deer and of her	
On the merits of the different alternatives:	. '
regardence water taken by wells that	
negatively impact available water to	
- land petities - Omeone needs to address	008-02
- Who Mc Claser land has dreed out and	
Preferred ways to mitigate concerns or affect. With facts 1 That Water	~
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also-there are Concerns about log fam	_
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water to the arie (1) has proper to retiling the	008-04
We are generally in favor of the hatchery is	1
- it well indeed return nature dalono	
to the recei - If the concerns of local	008-05
residents are addressed openly and honestly	000 00
than Shelieve it can be a positive	•
Charles Adding many	
Address 6470 = Southern Rus Deger	
Phone/E-Mail Address (optional) CC 9 Ryer a COnj. Com	
- Carrell In Contract	

Sections 3.2 through 3.17 of the Draft EIS describe the anticipated impacts to the natural and built environment as a result of the proposed project, including construction, operation, and cumulative effects on wildlife (Section 3.3), transportation (Section 3.10), air quality (Section 3.12), noise (Section 3.13), and public safety (Section 3.14). Although the proposed Lostine River Hatchery has the greatest potential to affect local residents given its proximity to homes and the current undeveloped nature of the site, it is the intent of the hatchery co-managers to be good neighbors within the community. Therefore, the proposed project includes use of best management practices, activities, and other measures such as shielding facility lights, planting of screening vegetation, controlling site dust, using building materials of colors and types to blend with existing structures, and limiting hours of construction to minimize impacts on people as well as the natural environment (plants, wildlife, water quality, etc.).

Section 3.10.3 of the Draft EIS, as revised for the Final EIS (Section 2.3), includes a discussion of the potential traffic impacts on nearby roads and residents. Traffic would increase at all sites temporarily during construction. At the Lostine River Hatchery, long-term impacts to traffic would be associated with the on-site residences, local employees, supply trips, and fish transport trips. For about 3 weeks in January, five to eight additional round-trips per day would be made by temporary workers employed at the hatchery (Zollman 2003, personnel communication). The number of trips to and from the hatchery and associated impacts on neighbors would be about the same whether the hatchery was located on the proposed site or across the river.

### 008-02

As referenced in the Draft EIS (Section 3.6.1.1), several groundwater wells were drilled at the proposed Lostine Hatchery site – the Lostine North Well, Lostine South Well, Primary Production Well, and South Observation Well. Information from these wells, and other sources, was used to characterize the area's geology, hydrogeology, and aquifer characteristics through aquifer testing. The results of aquifer testing were summarized in the Draft EIS and presented in detail in two associated technical reports prepared by Montgomery Watson (Report of Lostine Site Production Wells Installation and Testing, February 1999, and Lostine Site Production Wells Supplemental Installation and Testing, February 2001). The purpose of the Montgomery Watson studies was to identify a sustainable supply of good-quality, disease-free water for the proposed hatchery.

Montgomery Watson calculated that, if all three site supply wells were pumped simultaneously at optimal flow rates, the combined drawdown in the nearest domestic well would be about 1.5 feet after 10 weeks of continuous pumping and approximately 2 feet after 2 years of continuous pumping (for comparison, measurements showed approximately 112 feet of standing water in the Hayward well). Continuous pumping was used to conservatively estimate drawdown because simultaneous, continuous pumping of the three wells would be required for only 2 to 3 months per year under normal hatchery operations and would typically occur during the months of May and June when river levels would be at their highest (FishPro/HDR 2004b), rather than in January when the aquifer pumping tests were conducted and river levels are relatively low. Montgomery Watson concluded that desired groundwater production levels for the hatchery could be sustained and regulated without affecting production in nearby domestic wells.

The exact cause of the McClain's land drying out is not known. Contributing factors may include several years of drought and the drainage structures placed in the field directly below the pond, which now drain previously backed-up surface water (water that could have been "feeding" the pond). The three supply wells drilled at the proposed Lostine River Hatchery site (Lostine North Well, Lostine South Well, and the Primary Production Well) have not been pumped since aquifer testing was last performed in January 2001, and it is unlikely that these wells could be associated with any recent changes in surface water or groundwater levels or supply.

Future production from Lostine River Hatchery wells would have some impact on adjacent, hydraulically connected surface and groundwater during periods of pumping (McMillen 2004, personal communication).

However, if this project is approved for funding, the Northeast Oregon Hatchery co-managers would apply for water rights permits from the Oregon Water Resources Department for all surface water and groundwater withdrawals (see Table 4.7-1 in the Draft EIS), a process which includes public review of the application, and possible additional testing and assessment of effects of withdrawals on other nearby water users.

### 008-03

A log boom would be placed to protect the hatchery intake structure from logs and other debris. The pneumatically-controlled weir would minimize log build up and would be deflated when not in use. The weir would also deflate automatically if debris or high run-off caused surface water levels to rise to a predetermined level (set to avoid water backing up onto adjacent property). The weir would also be monitored for build up of debris, especially during periods of fish migration and, if necessary, hatchery operators would remove and properly dispose of such debris.

### 008-04

Although the return pipe would be smaller than the intake pipe, it would be capable of delivering the same volume of water back to the river.

### 008-05

Comment acknowledged; your support of the proposed project is appreciated. It is hoped that this environmental review process and future facility planning efforts would continue to foster mutual understanding and positive results for the project sponsors and the local community.

3-12 Bonneville Power Administration



# United States Department of the Interior

OFFICE OF THE SECRETARY
Office of Environmental Policy and Compliance
500 NE Multnomah Street, Suite 356
Portland, Oregon 97232-2036

IN REPLY REFER TO:

ER03/486

July 3, 2003

Mr. Mickey Carter Bonneville Power Administration Communications - DM-7 P.O. Box 12999 Portland, Oregon 97212

Dear Mr. Carter,

The Department of the Interior (Department) has reviewed the Draft Environmental Impact Statement (DEIS) for the Bonneville Power Administration, Grande Ronde - Imnaha Spring Chinook Hatchery Project, Northeast Oregon, Wallowa and Union Counties, Oregon. The Department offers the following for use in developing the Final Environmental Impact Statement (FEIS):

Pages 3-74 and 3-75: The DEIS describes constrictions of the river channel resulting from implementation of the proposed action at the Lostine River Hatchery (page 3-74, paragraph 2) and at the Imnaha Final Rearing Facility (page 3-75, paragraph 4 and 5); however, the document describes increased flooding potential in a generalized and qualitative manner, and only in terms of impacts to facility structures. The Department recommends that the FEIS include a hydraulic analysis which quantitatively describes and/or maps the extent of potential flooding and addresses impacts to fishery structures and infrastructure, as well as impacts to the environment beyond the fishery boundaries. We also recommend the analysis include predicted height and extent of flood waters, and the potential for flooding to modify or damage the stream channel, or scour the supports for the small-vehicle bridge. Should you have any questions regarding this recommendation, please contact Mr. James Devine with the U.S. Geological Survey's National Center in Reston, Virginia, at (703)648-6832.

009-01

Assistance with consultation that may be necessary under Section 7 of the Endangered Species Act can be obtained through Mr. Gary Miller, U.S. Fish and Wildlife Service, LaGrande Field Office, LaGrande, Oregon, (541)962-8584.

We appreciate the opportunity to comment.

Sincerely,

Preston Sleeger

Regional Environmental Officer

As shown in Figure 2-1 of the Final EIS (excerpted from a Federal Emergency Management Agency Map), most of the proposed Lostine River Hatchery facilities would be located outside the 100-year floodplain of the Lostine River. The intake, weir, and fish ladder would be located within the floodplain in a wide section of the river. Montgomery Watson conducted a preliminary hydraulic analysis of the river and proposed facilities in 2000 to determine water surface profiles through the project reach. The results of that analysis indicated that proposed hatchery facilities would not change the river cross section or cause flooding. A more refined hydraulic analysis would be conducted as part of the final hatchery design process (McMillen 2004, personal communication).

The Imnaha Final Rearing Facility is no longer proposed for construction (see Section 1.5 in the Final EIS). The activity proposed at this site is limited to removal of an existing Acrow (steel panel) bridge and concrete bridge abutments. The bridge panels would be reinstalled at the Lostine Adult Collection Facility and the concrete bridge abutments would be hauled off-site for disposal. Removing the bridge and its concrete abutments would slightly reduce channel constriction at this location.

JUL 1 4 2003

### GRANDE RONDE - IMNAHA SPRING CHINOOK PROJECT DEIS

Please mail your comments by July 7, 2003

### COMMENTS:

On the adequacy of the Environmental Impact Statement:	
I AMI BREATLY CONCERNED ABOUT MY WATER	010-01
BEING NECATIVLY IMPACTED.	010-01
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On the merits of the different alternatives:	
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Preferred ways to mitigate concerns or effects:	
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As referenced in the Draft EIS (Section 3.6.1.1), several groundwater wells were drilled at the proposed Lostine Hatchery site – the Lostine North Well, Lostine South Well, Primary Production Well, and South Observation Well. Information from these wells, and other sources, was used to characterize the area's geology, hydrogeology, and aquifer characteristics through aquifer testing. The results of aquifer testing were summarized in the Draft EIS and presented in detail in two associated technical reports prepared by Montgomery Watson (Report of Lostine Site Production Wells Installation and Testing, February 1999, and Lostine Site Production Wells Supplemental Installation and Testing, February 2001). The purpose of the Montgomery Watson studies was to identify a sustainable supply of good quality, disease-free water for the proposed hatchery.

To determine well production potential and to measure the effect of proposed hatchery groundwater withdrawals, Montgomery Watson conducted aquifer pumping tests in 1999 and 2000/2001. Both sets of tests showed consistent results, although slightly different groups of wells were used. Both sets of tests consisted of standard, step-rate tests (pumping at different rates for short periods of time) to evaluate well efficiency and capacity and to determine optimal pumping rates for the longer, constant-rate tests. In January 1999, the Lostine South Well was pumped at a constant rate of about 400 gpm for 70 hours while water levels were measured in the Lostine South Well and in the Hayward's well in the Lostine subdivision (about 1,500 feet south of the Lostine South Well). Maximum drawdown measured in the Hayward Well was a few inches (0.20 feet) and the well water level recovered quickly after pumping of the Lostine South Well stopped (97 percent recovery in 160 minutes). Montgomery Watson calculated a "worse case" drawdown of about 0.6 feet in the Hayward Well after 2 years of continuous 400 gpm pumping of the Lostine South Well ("worse case" because continuous pumping of site wells is not proposed).

In January 2001, Montgomery Watson conducted a 25-hour constant-rate test in the Lostine North Well, and a 14-day constant-rate test in the hatchery site Primary Production Well. For each of the constant-rate tests, water levels were monitored in three other wells including the South Observation Well (installed near the Lostine subdivision). As in the 1999 test, drawdown in the observation well was minimal (a maximum of about 6 inches) and the water level recovered quickly after pumping stopped. Montgomery Watson calculated that, if all three site supply wells were pumped simultaneously at optimal flow rates, the combined drawdown in the nearest domestic well would be about 1.5 feet after 10 weeks of continuous pumping and approximately 2 feet after 2 years of continuous pumping (for comparison, measurements showed approximately 112 feet of standing water in the Hayward well). Continuous pumping was used to conservatively estimate drawdown because simultaneous, continuous pumping of the three wells would be required for only 2 to 3 months per year under normal hatchery operations and would typically occur during the months of May and June when river levels would be at their highest (FishPro/HDR 2004b), rather than in January when the aquifer pumping tests were conducted and river levels are relatively low. Montgomery Watson concluded that desired groundwater production levels for the hatchery could be sustained and regulated without affecting production in nearby domestic wells.

### 010-02

Sections 3.2 through 3.17 of the Draft EIS describe the anticipated impacts to the natural and built environment as a result of the proposed project, including construction, operation, and cumulative effects of noise (Section 3.13). Although the proposed Lostine River Hatchery has the greatest potential to affect local residents given its proximity to homes and the current undeveloped nature of the site, it is the intent of hatchery comanagers to be good neighbors within the community. Therefore, the proposed project includes use of best management practices, activities, and other measures to avoid prolonged incidents of loud or excessive noise during construction and operation. During construction, noise-generating activities would be controlled by limiting the hours of construction. Measures to avoid loud or excessive noise during facility operations would include enclosing pumps and generators within buildings, and locating new facilities as far away as feasible from nearby residences.

See response 010-02. Section 3.9.3 of the Draft EIS presents a range of actions that would be taken to control light emitted from new facilities, including installation of downward directed, non-glare light fixtures and screening of new lighting with buildings and vegetation, where possible.

### 010-04

As discussed in Section 4.7.1 of the Draft EIS, both Union County and Wallowa County zoning allow for hatchery facilities in the areas proposed. All applicable permits for the proposed structures would be obtained prior to project construction.

As stated in the Draft EIS (Section 2.3), Section 1.8 of the Final EIS, and the NEOH Master Plan (Ashe et al. 2000), several other potential sites in the Imnaha and Grande Ronde Subbasins were evaluated, but dropped from further consideration due to a variety of reasons, including inadequate water supply or quality, lack of available space, inadequate power supply, and/or unavailability for acquisition. One suitable site was identified on the Lostine River, downstream of the proposed Lostine River Hatchery site. This site, at the Strathearn Ranch (Grande Ronde Subbasin site 22, Draft EIS, Table 1-1), met the project requirements, but the owner ultimately decided not to make the property available. Project team members also investigated, and eliminated from further consideration, possible sites on the west side of the Lostine River. The one feasible west-side site was dropped from further consideration because it would require substantially more site development (road improvements, bridge replacement, a powerline across the river, and extensive site clearing and grading); have a potentially greater impact to adjacent landowners (immediately adjacent to one residence and requiring several other residents to drive through hatchery facilities to access their property); and result in more disruption and potential impact to the natural environment (McMillen 2003, personal communication).

### 010-05

See response 010-01; aquifer pumping tests were conducted in January 1999, December 2000, and January 2001. According to U.S. Geological Survey stream gauging data, the lowest mean monthly streamflows in the Lostine River occur in January and February.

Also, if this project is approved for funding, the hatchery co-managers would apply for water rights permits from the Oregon Water Resources Department for all surface water and groundwater withdrawals (see Table 4.7-1 in the Draft EIS), a process which includes public review of the application, and possible additional testing and assessment of the potential effects of withdrawals on other nearby water users.

### 010-06

The Northeast Oregon Hatchery project is not a commercial project, that is, no direct economic benefit would come to any of the project's sponsors or hatchery co-managers. This project is intended to help in the conservation and recovery of an important and threatened salmon species. Although the facilities would have a few "industrial appearing" components (concrete raceways, cleaning basin, operations building, and pumping station), the Lostine River Hatchery and other proposed facilities would be constructed of materials consistent with other buildings in the vicinity and trees and vegetation would be used, where possible, to screen facilities from adjacent public and private properties (as described in Draft EIS Section 3.9.3). Also, please see response 010-04.

### 010-07

As described in Section 1.3 of the Final EIS, BPA is the lead agency for purposes of National Environmental Policy Act (NEPA) compliance, but several other agencies and tribes have worked closely with the BPA to develop the Proposed Action described in this EIS. The Nez Perce Tribe and the Confederated Tribes

of the Umatilla Indian Reservation are co-managers (along with the Oregon Department of Fish and Wildlife) of the spring/summer chinook conservation and recovery program in Northeast Oregon, and are the primary cooperating agencies for this EIS. The U.S. Fish and Wildlife Service, NOAA Fisheries, Forest Service, and other managers of habitat, fisheries, and hatcheries in Northeast Oregon were consulted during the development of the Proposed Action and this EIS. These tribes and agencies, as well as other local, state, and federal agencies and many local landowners are committed to working together to help in the protection, mitigation, conservation, and recovery of an important and threatened salmon species. It is unfortunate that, in light of the purpose and need for the project and the extensive cooperation involved in its planning, others may not support its intentions or its partners.

3-16 Bonneville Power Administration

Krande Konde-Umrala Spring Chinox Project DEIS On the adequacy of the EIS: I believe the study on the water usue is beared from the beginning, after the first well was drilled, I complained that a smallport On our property had been affected. On page 323 the Els states "operation of the prime production well may impact a nearly port, a discharge stream channel and a side channel during low flows, but the channel is not used as spawning habitat. A seven day text of the prime production well has shown no drawdown from the Lostine River! On page 3-71. the ES states Production can apparently be sustained for long. Teither of those statements address my complaint of the ground water being affected On page 362 the EIS states about 3,000 - 5000 square feet of wetland area would be lost at the outfall and prinary production well locations, My concern is with the ground water table that has already been altered, occurteme and the close of the wetland our adjacent property will intime, also involve changes to plant composition I believe the danage to the aguifes has already Ugen done. On page 3-123 the Els states" the Proposed action may get result in aduence impacts to wetlands that cannot be avoided. I believe at the rate they expect to pump water for the hatchers the water once hed by the subterranous

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As referenced in the Draft EIS (Section 3.6.1.1), several groundwater wells were drilled at the proposed Lostine Hatchery site – the Lostine North Well, Lostine South Well, Primary Production Well, and South Observation Well. Information from these wells, and other sources, was used to characterize the area's geology, hydrogeology, and aquifer characteristics through aquifer testing. The results of aquifer testing were summarized in the Draft EIS and presented in detail in two associated technical reports prepared by Montgomery Watson (Report of Lostine Site Production Wells Installation and Testing, February 1999, and Lostine Site Production Wells Supplemental Installation and Testing, February 2001). The purpose of the Montgomery Watson studies was to identify a sustainable supply of good quality, disease-free water for the proposed hatchery.

To determine well production potential and to measure the effect of proposed hatchery groundwater withdrawals, Montgomery Watson conducted aquifer pumping tests in 1999 and 2000/2001. Both sets of tests showed consistent results, although slightly different groups of wells were used. Both sets of tests consisted of standard, step-rate tests (pumping at different rates for short periods of time) to evaluate well efficiency and capacity and to determine optimal pumping rates for the longer, constant-rate tests. In January 1999, the Lostine South Well was pumped at a constant rate of about 400 gpm for 70 hours while water levels were measured in the Lostine South Well and in the Hayward's well in the Lostine subdivision (about 1,500 feet south of the Lostine South Well). Maximum drawdown measured in the Hayward Well was a few inches (0.20 feet) and the well water level recovered quickly after pumping of the Lostine South Well stopped (97 percent recovery in 160 minutes). Montgomery Watson calculated a "worse case" drawdown of about 0.6 feet in the Hayward Well after 2 years of continuous 400 gpm pumping of the Lostine South Well ("worse case" because continuous pumping of site wells is not proposed).

In January 2001, Montgomery Watson conducted a 25-hour constant-rate test in the Lostine North Well, and a 14-day constant-rate test in the hatchery site Primary Production Well. For each of the constant-rate tests, water levels were monitored in three other wells including the South Observation Well (installed near the Lostine subdivision). As in the 1999 test, drawdown in the observation well was minimal (a maximum of about 6 inches) and the water level recovered quickly after pumping stopped. Montgomery Watson calculated that, if all three site supply wells were pumped simultaneously at optimal flow rates, the combined drawdown in the nearest domestic well would be about 1.5 feet after 10 weeks of continuous pumping and approximately 2 feet after 2 years of continuous pumping (for comparison, measurements showed approximately 112 feet of standing water in the Hayward well). Continuous pumping was used to conservatively estimate drawdown because simultaneous, continuous pumping of the three wells would be required for only 2 to 3 months per year under normal hatchery operations and would typically occur during the months of May and June when river levels would be at their highest (FishPro/HDR 2004b), rather than in January when the aquifer pumping tests were conducted and river levels are relatively low. Montgomery Watson concluded that desired groundwater production levels for the hatchery could be sustained and regulated without affecting production in nearby domestic wells.

Montgomery Watson studies also indicate that there is a hydraulic connection between the aquifer tapped by the site wells and the Lostine River and that water stage in the river has an influence on water levels in site wells. The final design phase of the project would likely include additional aquifer pumping tests across a range of river conditions to refine water withdrawal plans to be implemented during hatchery operations (McMillen 2004, personal communication).

Also, if this project is approved for funding, the hatchery co-managers would apply for water rights permits from the Oregon Water Resources Department for all surface water and groundwater withdrawals (see Table 4.7-1 in the Draft EIS), a process which includes public review of the application, and possible additional testing and assessment of the potential effects of withdrawals on other nearby water users.

What has happened with ground water levels at and around the Lostine River Hatchery site (the existing situation) was not a topic of specific investigation carried out in support of this EIS. Contributing factors may include (among others) several years of drought which affects river flow and ground water levels, and the placement of drainage structures in the field directly below the pond (i.e., these drainage structures now drain previously backed-up surface water that could have been "feeding" the pond). The three supply wells drilled at the proposed Lostine River Hatchery site (Lostine North Well, Lostine South Well, and the Primary Production Well) have not been pumped since aquifer testing was last performed in January 2001, and it is improbable that these wells could be associated with any recent changes in surface water or groundwater levels or supply. Although it is probable that pumping from the wells during times of low river flow (which could affect groundwater recharge rate) could impact groundwater levels, pumping is planned to occur during May and June when flows are typically at their highest (FishPro/HDR 2004b). So, no discernable affect to adjacent groundwater and dependent vegetation is anticipated to result from pumping the wells.

Plant communities do change with changes in site water availability or supply. The adverse impacts to wetlands referred to on page 3-123 of the Draft EIS, however, refer to losses due to direct disturbance during construction and facility placement, not due to any anticipated changes in site hydrology. As discussed in the Draft EIS (Section 3.4.3.3), wetlands at the proposed Lostine River Hatchery would be directly affected by construction of the outfall and access road and piping in the vicinity of the primary production well. As described in Sections 4.5.2, 4.5.4 and 4.7.2 of the Draft EIS, the project includes a commitment to conduct formal wetland delineations at the proposed Lostine Adult Collection Facility and the Lostine River Hatchery and to implement any compensatory mitigation based on the outcome of the delineations and applicable regulations. Any necessary mitigation plan(s) would be developed for the loss of wetlands as part of the permitting process through the U.S. Army Corps of Engineers under Section 404 of the Clean Water Act.

### 011-02

The Northeast Oregon Hatchery project is not a commercial project, that is, no direct economic benefit would come to any of the project's sponsors or hatchery co-managers. This project is intended to help in the conservation and recovery of an important and threatened salmon species. As discussed in Section 4.7.1 of the Draft EIS, both Union County and Wallowa County zoning allow for hatchery facilities in the areas proposed. All applicable permits would be obtained for the project prior to construction.

As stated in the Draft EIS (Section 2.3), Section 1.8 of the Final EIS, and the NEOH Master Plan (Ashe et al. 2000), several other potential sites in the Imnaha and Grande Ronde Subbasins were evaluated, but dropped from further consideration due to a variety of reasons, including inadequate water supply or quality, lack of available space, inadequate power supply, and/or unavailability for acquisition. One suitable site was identified on the Lostine River, downstream of the proposed Lostine River Hatchery site. This site, at the Strathearn Ranch (Grande Ronde Subbasin site 22, Draft EIS, Table 1-1), met the project requirements, but the owner ultimately decided not to make the property available. Project team members also investigated, and eliminated from further consideration, possible sites on the west side of the Lostine River. The one feasible west-side site was dropped from further consideration because it would require substantially more site development (road improvements, bridge replacement, a powerline across the river, and extensive site clearing and grading); have a potentially greater impact to adjacent landowners (immediately adjacent to one residence and requiring several other residents to drive through hatchery facilities to access their property); and result in more disruption and potential impact to the natural environment (McMillen 2003, personal communication).